

REMARKS

Applicants respectfully request reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow.

New claims 20-26 have been added.

This amendment adds, changes and/or deletes claims in this application. A detailed listing of all claims that are, or were, in the application, irrespective of whether the claim(s) remain under examination in the application, is presented, with an appropriate defined status identifier.

After amending the claims as set forth above, claims 1-8, 10-16, and 18-26 are now pending in this application.

Rejections under 35 U.S.C. § 112

Claims 1-8, 10-16, 18, and 19 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. This rejection is respectfully traversed. The claims have been amended to overcome these rejections. Withdrawal of these rejections is respectfully requested.

Rejection under 35 U.S.C. § 103

Claims 1-8, 10-16, 18, and 19 are rejected under 35 U.S.C. § 103(a) as being unpatentable over JP 6-115786 or JP 6-74104 in view of U.S. Patent No. 6,299,099 (hereafter "Miller et al."). This rejection is respectfully traversed.

JP 6-115786 and JP 6-74104 each disclose roll support devices. However, neither JP 6-115786 or JP 6-74104 disclose or suggest a paper roll support device that comprises a pair of support means that each comprise a support member, "wherein the support members each comprise a contact member, an insertion section having a surface, and a flange, wherein the insertion section is fixed relative to the flange," as recited in claims 1 and 2. Nor does JP 6-115786 or JP 6-74104 disclose or suggest a paper roll support device "wherein the contact members comprise an erected section and a base section, wherein the contact members

engage with and travel along inclined grooves formed in the surface of the insertion section of each respective support member,” as recited in claims 1 and 2.

Miller et al. discloses a hydraulic web roll shaft in which air is supplied to a cylinder 32 to press a pressure amplifying piston 34 forward into a chamber 40, causing a lug actuating piston 50 to push forward against a set of pressure translating pieces 52, which in turn press a set of lugs or pressure applying members 54 outwardly against a web roll core 56. See Miller et al. at col. 3, lines 21-49. Miller et al. also discloses an embodiment of a telescoping chuck assembly 210 that includes a chuck that is retractable into a sleeve 214. See Miller et al. at col. 4, lines 27-29. Miller et al. discloses that compressed air can be introduced through a compressed air port 220 to advance a pressure amplification piston 232 and force a lug actuating piston 250 forward, which in turn forces a set of lug pressure pieces 252 to move outwardly and press a set of lugs or pressure members 254 outwardly against a web roll core 56. See Miller et al. at col. 4, lines 38-49. Air can be introduced into port 224 to force the rotatable subassembly 270 forward. See Miller et al. at col. 4, lines 55-63.

However, Miller et al. does not disclose or suggest a paper roll support device that comprises a pair of support means that each comprise a support member, “wherein the support members each comprise a contact member, an insertion section having a surface, and a flange, wherein the insertion section is fixed relative to the flange.” As shown in Figures 1 and 2 of Miller et al., the lug actuating piston 50 pushes forward relative to cylindrical housing 58 and assembly 10. Miller et al. similarly discloses in col. 4, lines 42-49, that lug actuating piston 250 is pressed forward by pressure in chamber 238. Therefore, Miller et al. fails to disclose or suggest a paper roll support device that comprises a pair of support means that each comprise a support member, “wherein the support members each comprise a contact member, an insertion section having a surface, and a flange, wherein the insertion section is fixed relative to the flange.”

It would not have been obvious to one of ordinary skill in the art to have modified the device of JP 6-115786 or JP 6-74104 by the teachings of Miller et al. to provide the device of claims 1 or 2. A basic requirement of a *prima facie* case of obviousness is that a prior art

reference, or prior art references when combined, must teach or suggest all of the claim limitations. See M.P.E.P. §§ 2143, 2143.03. JP 6-115786, JP 6-74104, and Miller et al., alone or in combination, fail to disclose all of the features of claims 1 and 2. Therefore, it would not have been obvious to combine the teachings of JP 6-115786 or JP 6-74104 and Miller et al. to provide the devices of claims 1 and 2. Nor would one of ordinary skill in the art have had a motivation to make such a modification.

Claims 10 and 18 depend from claims 1 and 2, respectively, and are allowable over JP 6-115786, JP 6-74104, and Miller et al. for at least the reasons discussed above. Claims 10 and 18 further recite “wherein the inclined grooves are gradually shallower in a radial direction so that as the base section of the contact member moves towards the flange the base section projects further from the insertion section.” JP 6-115786 and JP 6-74104 do not disclose or suggest a support member that includes an insertion member with inclined grooves. Miller et al. discloses a cylindrical housing 58 that accommodates pieces 52 in a set of slots. See Miller et al. at col. 3, lines 46-48, and Figure 5. However, Miller et al. fails to disclose or suggest that the slots for pieces 52 “are gradually shallower in a radial direction.” Miller et al. is silent in regard to this feature. Nor does Miller et al. disclose or suggest that the pieces 52 project further from the lug actuating piston 50 as the actuating piston 50 is pressed forward. JP 6-115786, JP 6-74104, and Miller et al., alone or in combination, fail to disclose or suggest a device “wherein the inclined grooves are gradually shallower in a radial direction so that as the base section of the contact member moves towards the flange the base section projects further from the insertion section.” Therefore, it would not have been obvious to one of ordinary skill to combine the teachings of JP 6-115786 or JP 6-74104 and Miller et al. to provide the devices of claims 1 and 2.

Furthermore, JP 6-115786, JP 6-74104, and Miller et al., alone or in combination, fail to disclose or suggest all of the advantages of applicants’ embodiments. For example, applicants’ embodiment uses only a single action to advance the support members and grip an inner tube, while Miller et al. discloses a device that uses two actions: one action to advance subassembly 270 forward and one action to project pieces 52, 252 and lugs 54, 254 outwards. Miller et al. discloses a pressure actuator to advance subassembly 270 forward (col. 4, lines

55-63) and a pressure actuator to project pieces 52, 252 and lugs 54, 254 outwardly (col. 3, lines 37-48; col. 4, lines 42-49). Therefore, Miller et al. does not disclose or suggest using a single action both to advance the support member and to grip the inner tube.

New claims 20-26

New claims 20-23 depend from claims 1 and 2 and are allowable over JP 6-115786, JP 6-74104, and Miller et al. for at least the reasons discussed above.

New claim 24 recites a paper roll support device for a rotary press that comprises support devices configured to support both sides of an inner tube on the paper roll, wherein the support devices each comprise a support member, wherein at least one support device is configured to move in a direction of another support device; wherein the support member comprises a contact member, an insertion section comprising a surface, and a flange; wherein the contact member comprises an erected section and a base section, wherein the contact members engage with and travel along inclined grooves formed in the surface of the insertion section of each respective support member; wherein the contact member is configured to extend from the insertion section due to contact between the contact member and the inner tube; a pressure change assigning device configured to provide pressure to at least one support device and cause the at least one support device to move in a direction that reduces a distance between a pair of support devices, wherein the pressure change assigning device is configured to provide pressure of at least two magnitudes; and wherein in an event of an emergency signal for an emergency stop of the rotary press, the pressure change assigning device is configured to increase contact force between the pair of support devices and the inner tube by increasing pressure to cause the at least one support device to move in the direction that reduces the distance between the pair of support devices. Claims 25 and 26 depend from claim 24.

JP 6-115786, JP 6-74104, and Miller et al., alone or in combination, fail to disclose or suggest all of the features of claim 24. For example, Miller et al. fails to disclose or suggest a device “wherein the contact member is configured to extend from the insertion section due to

contact between the contact member and the inner tube" because Miller et al. discloses pressure pieces 52, 252 and pressure members 54, 254 that are moved outward by an actuated piston 50, 250. See Miller et al. at col. 3, lines 37-46; col. 4, lines 39-49.

Applicants believe that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check or credit card payment form being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

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